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APPLICATION NO.	F.	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,648	03/24/2004		Gilbert Christopher Sih	030459	3901
23696	7590	06/19/2006		EXAMINER	
QUALCON			SONG, JASMINE		
5775 MOREHOUSE DR. SAN DIEGO, CA 92121				ART UNIT	PAPER NUMBER
				2188	
				DATE MAILED: 06/19/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)						
	10/807,648	SIH ET AL.						
Office Action Summary	Examiner	Art Unit						
	Jasmine Song	2188						
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet with the	correspondence address						
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING ID - Extensions of time may be available under the provisions of 37 CFR 1, after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by stature Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO .136(a). In no event, however, may a reply be to d will apply and will expire SIX (6) MONTHS fror te, cause the application to become ABANDON	N. imely filed not the mailing date of this communication. ED (35 U.S.C. § 133).						
Status								
1)⊠ Responsive to communication(s) filed on 24 I	March 2004.							
· _ ·	is action is non-final.							
<i>,</i>	· · · · · · · · · · · · · · · · · · ·							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims								
4)⊠ Claim(s) <u>1-34</u> is/are pending in the application.								
4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s) is/are allowed.								
6) Claim(s) is/are rejected.								
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.							
8) Claim(s) 1-34 are subject to restriction and/or election requirement.								
Application Papers								
9) The specification is objected to by the Examin	er.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a lis	t of the certified copies not receiv	ed.						
Attachment(s)		(070.440)						
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summar Paper No(s)/Mail D							
 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 	5) Notice of Informal 6) Other:	Patent Application (PTO-152)						

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Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I. Claims 1-18, drawn to a cached memory system includes a cache memory located close to a processor core, an on-chip memory at the next higher memory level, and an external main memory at the topmost memory level, classified in class 711, subclass 117.

- Group II. Claims 19-34, drawn to two processing units simultaneously access two memories at two different levels in the memory system, classified in class 711, subclass 168.
- 2. The inventions are distinct, each from the other because of the following reasons:

 Inventions Group I and Group II are related as subcombinations disclosed as

 usable together in a single combination. The subcombinations are distinct from each
 other if they are shown to be separately usable. In the instant case, each of the
 invention in Group I and II has separate utility because the invention of group I has the
 utility for a cached memory system includes a cache memory located close to a
 processor core, an on-chip memory at the next higher memory level, and an external

main memory at the topmost memory level, the invention of group II has the utility for

two processing units simultaneously access two memories at two different levels in the

memory system. See MPEP § 806.05(d).

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3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and recognized divergent subject matter, and because the divergent searches required for the different groups, restriction for examination purposes as indicated is proper.

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- 4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
- 5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(h).
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasmine Song whose telephone number is 571-272-4213. The examiner can normally be reached on 7:30-5:30 (first Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 571-272-4210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jasmine Song

Patent Examiner

June 13, 2006